

**IN THE UNITED STATES PATENT AND TRADEMARK OFFICE**

IN RE APPLICATION OF: Atsushi IWATA, et al.

SERIAL NUMBER: 10/549,848

FILING DATE: September 19, 2005

FOR: METHOD OF ALTERING CRYSTAL STRUCTURE OF GROUP 13 ELEMENT NITRIDE, GROUP 13 ELEMENT NITRIDE AND STRUCTURE MATERIAL CONTAINING CUBIC NITRIDE

**RESPONSE TO NOTICE OF MISSING REQUIREMENTS UNDER 35 USC 371**

COMMISSIONER FOR PATENTS  
BOX PCT  
ALEXANDRIA, VIRGINIA 22313

SIR:

Responsive to the notification dated May 9, 2006, and in accordance with the provisions of 35 USC 371, Applicants submit herewith a Rule 63 Declaration, a Supplemental Application Data Sheet, a Preliminary Amendment with Replacement Drawing Sheets, and an English Translation.

In light of the foregoing, this application is deemed to be in proper condition for examination and such favorable action is earnestly solicited.

Our payment in the amount of \$0.00 is paid herewith by credit card. If any difference exists between the amount due and the amount being paid herewith, please charge or credit the difference to our Deposit Account No. 15-0030. A duplicate copy of this sheet is enclosed.

If these papers are not considered timely filed by the Patent and Trademark Office, then a petition is hereby made under 37 C.F.R. §1.136 and any additional fees required under 37 C.F.R. §1.136 for any necessary extension of time may be charged to Deposit Account No. 15-0030. A duplicate copy of this sheet is enclosed.

Respectfully Submitted,

OBLON, SPIVAK, McCLELLAND,  
MAIER & NEUSTADT, P.C.



\_\_\_\_\_  
Norman F. Oblon  
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(OSMMN 05/06)

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MAIL STOP PCT

Docket No. 278591US0PCT

IN RE APPLICATION OF: Atsushi IWATA, et al.

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IAP7 Rec'd PCT/PTO 22 MAY 2006

COMMISSIONER FOR PATENTS  
ALEXANDRIA, VIRGINIA 22313

SIR:

Transmitted herewith is an amendment in the above-identified application.

- No additional fee is required
- Small entity status of this application under 37 C.F.R. §1.9 and §1.27 is claimed.
- Additional documents filed herewith:
  - Supplemental Application Data Sheet/Response to Notice of Missing Requirements
  - English Translation of the Specification/Drawings (5 Sheets)/Declaration
  - Notification of Missing Requirements

The Fee has been calculated as shown below:

CLAIMS	CLAIMS REMAINING		HIGHEST NUMBER PREVIOUSLY PAID	NO. EXTRA CLAIMS	RATE	CALCULATIONS
TOTAL	5	MINUS	20	0	x \$50 =	\$0.00
INDEPENDENT	3	MINUS	3	0	x \$200 =	\$0.00
APPLICATION SIZE		MINUS	100	(each addtl. 50 sheets)	x \$250 =	\$0.00
			<input type="checkbox"/> MULTIPLE DEPENDENT CLAIMS		+ \$360 =	\$0.00
			TOTAL OF ABOVE CALCULATIONS			\$0.00
			<input type="checkbox"/> Reduction by 50% for filing by Small Entity			\$0.00
						TOTAL \$0.00

- A check in the amount of \$0.00 is attached.
- Credit card payment form is attached to cover the fees in the amount of \$0.00
- Please charge any additional Fees for the papers being filed herewith and for which no check or credit card payment is enclosed herewith, or credit any overpayment to deposit Account No. 15-0030. A duplicate copy of this sheet is enclosed.
- If these papers are not considered timely filed by the Patent and Trademark Office, then a petition is hereby made under 37 C.F.R. §1.136, and any additional fees required under 37 C.F.R. §1.136 for any necessary extension of time may be charged to Deposit Account No. 15-0030. A duplicate copy of this sheet is enclosed.

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NITRIDE

**LETTER SUBMITTING REPLACEMENT DRAWING SHEETS**

COMMISSIONER FOR PATENTS  
Alexandria, VA 22313

SIR:

Responsive to the below indicated communication, the following drawing sheets are submitted herewith:

5 Replacement Drawing Sheets       \_\_\_\_\_ New Drawing Sheets

Official Action dated \_\_\_\_\_

Notice of Allowance/Issue Fee dated \_\_\_\_\_

PRELIMINARY AMENDMENT dated HEREWITH

The changes and/or modifications made include the following:

The attached Replacement Drawing Sheets for Figs.: 1-5 have been translated into English as required. The Applicant has requested a change to Fig. 2, correcting a typographical error within the drawing. The drawing originally filed was written as, X-Y-Z- $\Theta$  stage. The correction now reads X-Y-Z- $\Theta$  stage 8.

Respectfully Submitted,

OBLON, SPIVAK, McCLELLAND,  
MAIER & NEUSTADT, P.C.  
Norman F. Oblon

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TEP



## UNITED STATES PATENT AND TRADEMARK OFFICE

UNITED STATES DEPARTMENT OF COMMERCE  
 United States Patent and Trademark Office  
 Address: COMMISSIONER FOR PATENTS  
 P.O. Box 1450  
 Alexandria, Virginia 22313-1450  
[www.uspto.gov](http://www.uspto.gov)

U.S. APPLICATION NUMBER NO.	FIRST NAMED APPLICANT	ATTY. DOCKET NO.
10/549,848	Atsushi Iwata	278591US0PCT
INTERNATIONAL APPLICATION NO.		
PCT/JP04/03739		
I.A. FILING DATE		PRIORITY DATE
03/19/2004		03/20/03
CONFIRMATION NO. 7064		
371 FORMALITIES LETTER		
 *OC000000018718252*		

ET Date Mailed: 05/09/2006

### NOTIFICATION OF MISSING REQUIREMENTS UNDER 35 U.S.C. 371 IN THE UNITED STATES DESIGNATED/ELECTED OFFICE (DO/EO/US)

The following items have been submitted by the applicant or the IB to the United States Patent and Trademark Office as a Designated / Elected Office (37 CFR 1.495).

- Copy of the International Application filed on 09/19/2005
- Copy of the International Search Report filed on 09/19/2005
- Information Disclosure Statements filed on 09/19/2005
- Request for Immediate Examination filed on 09/19/2005
- U.S. Basic National Fees filed on 09/19/2005

RECEIVED: 5-11-06  
 OBLON, SPIVAK, McCLELLAND  
 MAIER & NEUSTADT, P.C.  
**DOCKETING DEPT.**  
 Initials/Date Docketed: CAN/5-11-06  
 Type of Resp(s): DD  
 Due Date(s): 7-9-06

The following items **MUST** be furnished within the period set forth below in order to complete the requirements for acceptance under 35 U.S.C. 371:

- Translation of the application into English. Note a processing fee will be required if submitted later than 30 months from the priority date.
- Oath or declaration of the inventors, in compliance with 37 CFR 1.497(a) and (b), identifying the application by the International application number and international filing date.

**ALL OF THE ITEMS SET FORTH ABOVE MUST BE SUBMITTED WITHIN TWO (2) MONTHS FROM THE DATE OF THIS NOTICE OR BY 32 MONTHS FROM THE PRIORITY DATE FOR THE APPLICATION, WHICHEVER IS LATER. FAILURE TO PROPERLY RESPOND WILL RESULT IN ABANDONMENT.**

The time period set above may be extended by filing a petition and fee for extension of time under the provisions of 37 CFR 1.136(a).

Applicant is reminded that any communications to the United States Patent and Trademark Office must be mailed to the address given in the heading and include the U.S. application no. shown above (37 CFR 1.5)

A copy of this notice **MUST** be returned with the response.

**COPY**

DARRELL C COTTMAN

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Telephone: (703) 308-9140 EXT 203

PART 1 - ATTORNEY/APPLICANT COPY

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U.S. APPLICATION NUMBER NO.	INTERNATIONAL APPLICATION NO.	ATTY. DOCKET NO.
10/549,848	PCT/JP04/03739	278591US0PCT

FORM PCT/DO/EO/905 (371 Formalities Notice)